

BAEYAN, Ye. A. (Moscow)

"Organization of Psychiatric Help in the USSR."

report presented at the third World Congress of Psychiatry, Montréal Canada,
4-8 June 1961.

MOROZOV, G.V., otv. red.; BABAYAN, E.A., red.; BOGOLEPOV, N.K., red.;
GORDOVA, T.N., red.; ZHARIKOV, N.M., red. KERBIKOV, O.V.,
red.; ROZHNOV, V.Ye., redaktor; SLUSHEVSKIY,
I.F., red.; SNEZHNEVSKIY, A.V., red.; FEDOTOV, D.D., red.;
SHOSTAKOVICH, V.V., red.; BOGDANOVICH, L.A., red.

[Current problems of psychiatry and neuropathology] Aktual'nye
voprosy psikhiiatrii i nevropatologii. Moskva, Izd-vo M-va
zdravookhraneniia SSSR, 1963. 400 p. (MIRA 16:10)
(PSYCHIATRY)
(NERVOUS SYSTEM—DISEASES)

BABAYAN, E.A., UL'YANOVA, G.A.

Approbation and introduction of new drugs is one of the most
important tasks of public health. Apt. dele 13 no.1:6-8
Ja-F '64. (MIRA 17:4)

1. Ministerstvo zdavookhraneniya SSSR.

BABAYAN, E.A.; SEREBRYAKOVA, Z.N. (Moskva)

Some problems in the organization of psychoneurological
services. Zhur. nevr. i psikh. 64 no.1:137-141 '64.
(MIRA 17:5)

SEREBRYAKOVA, Zoya Nikolayevna; BABAYAN, E.A., red.

[Organization of psychiatric care and nursing and prospects for its development in the U.S.S.R.] Organizatsiia psikhiatricheskogo patronazha i perspektivy ego razvitiia v SSSR. Moskva, Meditsina, 1965. 96 p. (MIRA 18:5)

SARADZHISHVILI, I.E., prof., otv. red.; BANSCHNIKOV, V.M., prof.,
zasl. deyatel' nauki, otv. red.; BABAYAN, B.A., red.;
KONOVALOV, N.V., prof., red.; STREBYAKOVA, Z.N., red.;
ZURABASHVILI, A.D., red.; RYZHIKOV, G.V., kand. med. nauk,
red.

[Epilepsy; problems of its etiology, pathogenesis, clinical
aspects, classification, treatment and expertise. Reports
at the All-Union Symposium on the Problems of Epilepsy] Epi-
lepsiya; voprosy etiologii, patogeneza, kliniki, klassifi-
katsii, lecheniya i ekspertizy. Doklady na ... Moskva, M-vo
zdravookhraneniya SSSR, 1964. 2 v. (MIRA 17:11)

1. Vsesoyuznyy simpozium po probleme epilepsii, 1964.
2. Upravleniye spetsializirovannoy meditsinskoy pomoshchi
Ministerstva zdravookhraneniya SSSR (for Babayan) 3. Prav-
leniye Vsesoyuznogo nauchnogo meditsinskogo obshchestva
nevropatologov i psikiatrov (for Banshchikov). 4. Institut
nevrologii AN SSSR, Deystvitel'nyy chlen AN SSSR (for
Konovalov). 5. Institut klinicheskoy i eksperimental'noy
nevrologii AN SSSR, Deystvitel'nyy chlen AN SSSR (for
Saradzhishvili).

BABAYAN, E.A.

Case of melanoblastoma with metastases in the cerebral dura mater. Trudy 1-go MMI 34:288-297 '64.

Organization of occupational therapy in psychoneurological institutions of the Soviet Union. Trudy 1-go MMI 34:449-454
(MIRA 18:11)

ACC NR: AR6008636 (N) SOURCE CODE: UR/0397/65/000/019/0043/0043

AUTHOR: Babayan, E. A.; Ayrapetyan, M. A.

TITLE: Occupational skin injuries of workers engaged in flotation of copper-molybdenum ores

SOURCE: Ref. zh. Farmakologiya. Toksikologiya, Abs. 19.54.323

REF SOURCE: Sb. Materialy 2-y Itog. nauchn. konferentsii in-ta gigiyeny truda i profzabolevaniy, posvyashch. vopr. gigiyeny truda i proipatol., 1963. Yerevan, 1964, 73-75

TOPIC TAGS: industrial medicine, dermatology, skin physiology, copper, molybdenum

ABSTRACT: 170 workers of a copper-molybdenum flotation plant were examined. Various changes of the skin and its appendages were noted in 68 cases. Most of the patients (52) suffered loss of hair and 42 patients had dry cracked skin. Dystrophic change of nails and nail bed was found in 14 cases, teleangiectasia was found in 35 cases and injury of the sebaceous follicle apparatus was found in 19 cases. 7 persons suffered from eczema, 18 persons had dermatitis and 3 persons had toxicoderma. S. K. [Translation of abstract].

SUB CODE: 06
Card 1/1 11b

UDC: 615.92

BABAYAN, E.B.

Morphology of the blood in endarteritis obliterans. Trudy Erev.
med.inst. no.11:331-334 '60. (MIRA 15:11)

1. Iz gospi'tal'noy khirurgicheskoy kliniki (zav. - prof. I.Kh.
Gevorkyan) Yerevanskogo meditsinskogo instituta.
(ARTERIES--DISEASES) (BLOOD--EXAMINATION)

BABAYAN, E.B.

Volume of erythrocytes in endarteritis obliterans. Zhur. eksp.
i klin. med. 3 no.1: 37-44'63. (MIRA 16:10)

1. Klinika gospiatal'noy khirurgii Yerevanskogo meditsinskogo
instituta.

(ARTERIES — DISEASES) (ERYTHROCYTES)

SHATAKHYAN, M.P.; ~~BABAYAN~~, E.B.

Leukocytosis focus in acute appendicitis. Sov.med. 26 no.1:111-113
Ja '63, (MIRA 16:4)

1. Iz kafedry gospital'noy khirurgii (zav. - prof. I.Kh.
Gevorkyan) Terevanskogo meditsinskogo instituta.
(LEUCOCYTOSIS) . (APPENDICITIS)

BANSHCHIKOV, V.M., zasl. deyatel' nauki, prof., glav. red.; ROKHLIN, L.L., prof., zam. glav. red.; SHMIDT, Ye.V., prof., red.; KERBIKOV, O.V., prof., red. [deceased]; MYASISHCHEV, V.N., zasl. deyatel' nauki prof., red.; FELINSKAYA, N.I., prof. red.; MIKHEYEV, V.V., prof., red.; FEDOTOV, D.D., prof., red.; BABAYAN, E.M., red.; MOROZOV, G.K., doktor med. nauk, red.; SEREBRYAKOVA, Z.N., kand. med. nauk, red.; USHAKOV, G.K., doktor med. nauk, red.; SNEZHNEVSKIY, A.V., prof., red.

[Transactions of the 4th All-Union Congress of Neuro-
nathologists and Psychiatrists] Trudy Vsesoiuznogo s"ezda
nevropatologov i psikhiatrov. Moskva, Vses. nauchn. med. ob-
vo nevropatologov i psikhiatrov. Vols. 1, 5-6. 1965.

(MIRA 18:11)

1. Vsesoyuznyy s"yezd nevropatologov i psikhiatrov. 4th,
Moscow, 1963. 2. Deystvitel'nyy chlen AMN SSSR (for Shmidt,
Kerbikov, Snezhnevskiy).

BABAYAN, G.A.

Oratocelis communimacula Hb. as a predator of Didesmococcus
megriensis Borch. Izv.AN Arm.SSR.Biol.nauki 15 no.9:83-88 S '62.
(MIRA 15:11)

(ARMENIA---PARASITES---SCALE INSECTS)
(ARMENIA---OWLET MOTHS)
(ARMENIA---PEACH---DISEASES AND PESTS)

BABAYAN, G.A.

The fig soft scale *Eulecanium ficiphilum* Borchs. (Homoptera, Coccoidae) and its control in Armenia. Ent. oboz. 42 no.1: 77-84 '63. (MIRA 16:8)

1. Institut vinogradarstva, vinodeliya i plodovodstva Armyanskoy SSR, Yerevan.
(Armenia--Scale insects--Extermination)
(Armenia--Fig--Diseases and pests)

SOV/111-53-2-14/27

6(7)

AUTHOR: Babayan, G.A., Chief

TITLE: Experience of the Continuing Production
Conference at the Yerevan Post Office (Opyt postoyanno
deystvuyushchego proizvodstvennogo soveshchaniya na
Yerevanskom pochtamte)

PERIODICAL: Vestnik svyazi, 1959, Nr 2, pp 22-24 (USSR)

ABSTRACT: The article describes the work of a permanently operative production conference at the Yerevan post office, formed in February 1958, and its contribution to improvement of services, working conditions and overfulfillment of the post office's assigned plans during the past year. The receipts plan for 1958 was fulfilled 108.2%, giving the state an extra 1,145,286 rubles in revenue. Labor productivity rose by 4/1% over 1957, and costs were cut by 8%. City communications branches also overfulfilled plans as follows: in the money-order department (Ovsepyan, Chief), 111%; in the department for reception of radio set owner's subscription fees

Card 1/3

Experience of the
Yerevan Post Office

Contributing

SOV/111-59-2-14/27
Production Conference at the

(Garibyan, Chief), 128%; in the 7th city communications branch (Samvelyan, Chief), 133%; in the 3rd city communications branch (Vantsyan, Chief), 125%; in the 13th city communications branch (Sarkisyan, Chief), 115%. The conference debated the following subjects, among others: "The status of the delivery of the press and mail to the city population", "The processing, payment, and delivery of money orders and pensions", "The production-economic activities of the post office for the first half year", "Improvement in the organization of work", "Work experience of leading postmen", as well as questions on the reception, processing, and delivery of telegrams, and the placing of inter-city telephone calls in city communications branches, and work in a number of the city communications branches. The conference reviewed and passed concrete decisions on these and other questions. All workers took part in the sittings, and decisions were publicized and widely discussed at general meetings. Measures to improve conditions in the

Card 2/3

Experience of the
Yerevan Post Office

Continuing

SOV/111-89-2-14/2.7
Production Conference at the

above and other areas are touched on by the author, who dwells also on the methods used to achieve these aims, chiefly socialist competition, generous awards and bonuses for outstanding workers. Postmen compete for the title of "best by profession". In a drive to register radio and TV sets in the city the post office received a supplementary 120,000 rubles. The following men served in the presidium of the conference: Neresyan, Tovmosyan, Tarovkova, Isaakyan, Minasyan, Sinanyan and Garibyan. The following postmen are cited for outstanding work: Avetyan, Chakryan, Karagezyan, Barsegyan, Tosunyan, Saakyan and Arutyunyan. There are 4 photographs.

ASSOCIATION: Yerevanskiy pochtamt (Yerevan Main Post Office)

Card 3/3

BARAYAN, G.A.

Business accountability at the Erivan post office.
Vest. sviazi 20 no.4:19-20 Av '60. (MIRA 13:7)

1. Nachal'nik Yerevanskogo pochtamta.
(Erivan--Postal service--Accounting)

ISAYAN, M.V.; BABAYAN, G.A.

Intranasal alcohol - novocaine injection in some eye diseases.
Zhur. eksp. i klin. med. 3 no.4:69-76 '63 (MIRA 16:12)

1. Kafedra glaznykh bolezney Yerevanskogo meditsinskogo instituta.

SHUMRYAN, K.I., VARTYAN, V.A., BABYAN, M.

Hyaluronidase content and activity in tissue extracts of tonsils
in chronic tonsillitis. Zhur. eksp. i klin. med. 2 no.6:81-87 '62.
(MIRA 18-10)

1. Kafedra bolezney ukha gorla i nosa Yerevanskogo meditsinskogo
institute.

SHUKURYAN, K.G., dotsent; ALLAVERDYAN, A.G., kand. med. nauk;
BABAYAN, G.A.

Morphological and histochemical changes in tonsillar and peritonsillar tissues following the introduction of various concentrations of alcohol into the tonsils. Vest. oto-rin. 25 no.4:47-52 J1-Ag '63. (MIRA 17:1)

1. Iz kafedry bolezney ukha, nosa i gorla (zav. - doktor med. nauk N.A. Nadzharyan) i kafedry patologicheskoy anatomii (zav. - dotsent V.T. Gabrielyan) Yerevanskogo meditsinskogo instituta.

DAVTYAN, G.S.; BABAYAN, G.B.

Some problems in fertilizing alfalfa on the reclaimed soils of the
gravelly semi-desert. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 6 no.6:
47-55 '53. (MLRA 9:8)
(Armenia--Alfalfa) (Fertilizers and manures)

BABAYAN, G.B.

Effectiveness of granulated superphosphate introduced with winter seed of wheat. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki. 6 no.7: 83-87 '53. (MLRA 9:8)

1. Laboratoriya agrokhimii AN Armyanskoy SSR.
(Wheat) (Phosphates)

USSR / Soil Science. Mineral Fertilizers.

J-4

Abs Jour: Ref Zhur-Biol., No 8, 1958, 34373.

Author : ~~Labayan, G. B.~~

Inst : Academy of Sciences of the Armenian SSR.

Title : Utilization of Soil Agro-Chemical Maps of Collective Farms for Preparation of Plans for Application of Fertilizers.

Orig Pub: Izv. AN Arm SSR, Biol. i s.kh. n., 1957, 10, No 3, 51-55.

Abstract: For preparation of scientifically substantiated plans for application of fertilizers, the author recommends compilation of exact soil-agrochemical maps, which have to indicate various soils, chemical and mechanical composition of soil strata for plowing, as well as sub-strata under the plowing area, the degree of sensitivity of agro-culti-

Card 1/2

BABAYAN, G.B.

Increase in the protein content of wheat and the possibility of transmission of this property to progeny. Izv. AN Arm. SSSR, Biol. i sel'khoz. nauki 11 no.3:77-80 Mr '58. (MIRA 11:3)

1. Laboratoriya agrokhimii AN ArmSSR.
(Wheat) (Proteins)

BABAYAN, G. B., Cand Agric Sci (diss) -- "The effectiveness of fertilizers and the conditions for their use with grain crops in Basargecharskiy Rayon, Armenian SSR". Yerevan, 1959. 33 pp (Acad Sci Armenian SSR, Laboratory of Agrochem), 150 copies (KL, No 14, 1960, 134)

BABAYAN, G.B.

Comparison and a brief analysis of data obtained in field and
plant culture experiments and chemical soil analysis. Izv.
AN Arm.SSR.Biol.nauki 12 no.7:79-83 J1 '59. (MIRA 12:10)

1. Laboratoriya agrokhimii Akademii nauk Armyanskoy SSR.
(ARMENIA--SOILS--ANALYSIS)

BABAYAN, G.B.

Effect of increasing nitrogen amounts on spring wheat yields.
Izv. AN Arm. SSR. Biol. nauki 12 no.9:81-83 S '59.
(MIRA 12:12)

1. Laboratoriya agrokhimii Akademii nauk ArmSSR.
(Armenia--Wheat--Fertilizers and manures)
(Plants, Effect of nitrogen on)

BABAYAN, G.B.; KARAGULYAN, S.A.

Some features of the nitrogen and phosphorus nutrition of
sainfoin. Dokl AN Arm.SSR 29 no.4:181-185 '59.

(MIRA 13:4)

1. Laboratoriya agrokhimii AN ArmSSR. Predstavleno akademikom
AN ArmSSR G.S.Davtyanov.
(Sainfoin—Fertilizers and manures)

BABAYAN, G.B.

Agrochemical characteristics of soils of the Mazra Valley. Izv.
AN Arm. SSR. Biol. nauki 13 no. 7:47-54 J1 '60. (MIRA 13:10)

1. Laboratoriya agrokhimii Akademii nauk Armyanskoy SSR.
(MAZRA VALLEY--SOILS--COMPOSITION)

BABAYAN, G.B.; KARAGULYAN, S.A.

Effect of fertilizers on the effectiveness of gibberellin.
Dokl.AN Arm.SSR 31 no. 2:91-96 '60. (MIRA 13:11)

1. Laboratoriya agrokhimii Akademii nauk Armyanskoy SSR.
Predstavleno akademikom AN Armyanskoy SSR G.S.Davtyanom.
(Fertilizers and manures) (Gibberellins)

BABAYAN, G.B.; KARAGULYAN, S.A.

Effect of fertilizers on the effectiveness of gibberellin.
Trudy Inst. mikrobiol. no.11:346-350 '61 (MIRA 16:11)

1. Laboratoriya agrokhimii AN Armyanskoy SSR.

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BABAYAN, G.B.; GASPARYAN, L.E.

Effect of dehydration of soil samples on the content of readily
soluble phosphoric acid. Izv. AN Arm. SSR. Biol. nauki 15 no.12:
75-80 D'62 (RUSA 17:8)

1. Laboratoriya agrokhimii AN Arm. SSR.

BABAYAN, G.B.; AMYAN, M.V.

Loss of nitrogen, phosphorus, potassium and calcium from alpine
meadows. Izv. AN Arm. SSR. Biol. nauki 16 no.11:27-32 N '63.
(MIRA 17:4)

1. Laboratoriya agrokhimii AN Armyanskoy SSR.

BABAYAN, G.D.; BARKHATOV, G.V.; BOBROV, A.K.; BONDARENKO, V.I.; VASIL'YEV,
V.G.; KOBELYATSKIY, I.A.; NIKOLAYEVSKIY, A.A.; TIKHOMIROV, Yu.P.;
CHIKPIKOV, K.R.; CHERSKIY, N.V.; CHICHMAREV, V.G.; BEKMAN, Yu.K.,
vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Geology, and oil and gas potentials of the Yakut A.S.S.R.] Geo-
logicheskoe stroenie i neftegazonosnost' Iakutskoi ASSR. Pod red.
V.G.Vasil'eva. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-
toplivnoi lit-ry, 1960. 478 p. (MIRA 13:11)

(Yakutia--Petroleum geology)
(Yakutia--Gas, Natural--Geology)

BABAYAN, G.D.; BOBROV, A.K.

Structure of the Vilyuy syncline and Verkhoyansk trough in the
Jurassic superface. Geol. i geofiz. no.3:35-41 '61. (MIRA 14:5)

1. Yakutskoye territorial'noye geologicheskoye upravleniye.
(Yakutia—Geology, Structural)

BABAYAN, G.D.

Recent data on the geology, and oil and gas potentials of
the lower Vilyuy upland zone. Geol. nefti i gaza 6 no.2:9-13
F '62. (MIRA 15:2)

1. Yakutskoye territorial'noye geologicheskoye upravleniye.
(Vilyuy Region—Petroleum geology)
(Vilyuy Region—Gas, Natural—Geology)

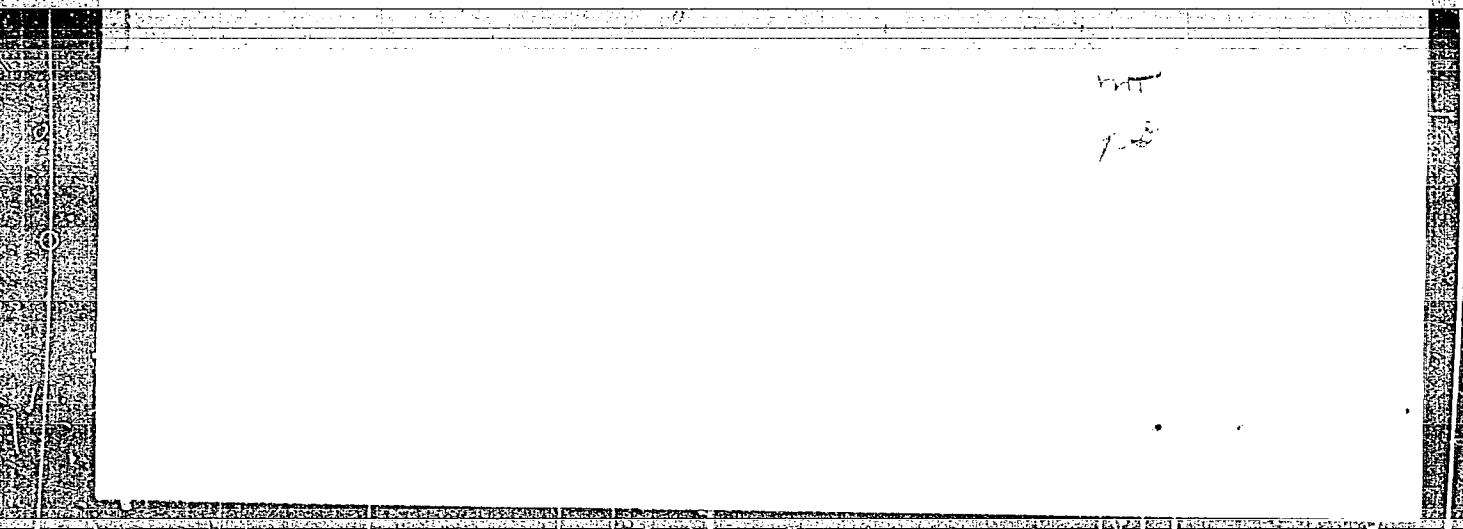
BABAYAN, G.D.

Recent data on the geological structure and oil and gas potential
of the Vilyuy syncline. Geol. nefi i gaza 8 no.8:19-24 Ag '64.
(MIRA 17:8)

-BABAYAN, G.G.

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13-15/18/14
Category: USSR / Physical Chemistry

Thermodynamics. Thermochemistry. Equilibrium. Physico-chemical analysis. Phase transitions.

B-8

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29933

Author : Mikheyeva V. I., Babayan G. G.

Inst : Academy of Sciences USSR

Title : Fusion Diagram of the System Magnesium - Copper - Nickel

Orig Pub: Dokl. AN SSSR, 1956, 108, No 6, 1086-1087

Abstract: By methods of thermal analysis and microstructure a study was made of the Mg - Cu - Ni system. Binary Mg-Cu - MgNi₂ section divides the fusion diagram of the system in two parts in which crystallization takes place independently. The fusion diagram includes fields of primary crystallization of Mg₂Ni, Mg₂Cu, fields of solid solutions MgCu, MgNi, Cu - Ni and solid solution of Mg base. There are six lines of monovariant equilibrium and two non-variant points; triple eutectic (480°, 84.2 at. % Mg, 15% Cu) and transformation point

Card : 1/2

-48-

Category: USSR / Physical Chemistry

Thermodynamics. Thermochemistry. Equilibrium. Physico-chemical analysis. Phase transitions.

B-8

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29933

(540°, 65 at .% Mg, 33.5% Cu). The possibility is confirmed of the formation within boundaries of uniform phase of solid solutions between compounds of MgCu and MgNi, of a compound of the assumed composition MgCuNi, which is revealed only by isotherms of Mg field.

Card : 2/2

-49-

USSR/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical B-8
Analysis. Phase Transition.

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, No 26137

Author : V.I. Mikhoyeva, G.G. Babayan

Inst : Academy of Sciences of USSR.

Title : Chemical Nature of Ternary Intermetallic Phases in Systems
Magnesium - Copper - Zinc and Magnesium - Copper - Nickel.

Orig Pub : Dokl. AN SSSR, 1956, 109, No 4, 785-786

Abstract : The existence of chemical compounds $MgCuZn$ and $MgCuNi$ was established by the method of measuring the electric resistance and its temperature factor in the regions of homogeneity of the solid phase in the systems $Mg-Cu-Zn$ and $Mg-Cu-Ni$. The solid phases of these systems may be considered as ternary berthollides - phases containing the above mentioned compounds in the state of dissociation or in the state of change of component valence.

Card : 1/1

MANVELYAN, M.G.; BABAYAN, G.G.; ABRAMYAN, A.A.

Thermal dehydration of sodium metasilicate hydrate ($\text{Na}_2\text{SiO}_3 \cdot 9\text{H}_2\text{O}$)
Izv. AN Arm.SSR. Khim.nauki 11 no.3:159-167 '58. (MIRA 11:11)

1. Nauchno-issledovatel'skiy institut khimii Sovnarkhoza ArmSSR.
(Sodium silicates) (Dehydration (Chemistry))

MANVELYAN, M.G.; RABAYAN, G.G.; SAYAMYAN, F.A.; VOSKANYAN, S.S.

Solubility diagram of the quaternary system Na_2SiO_3 - K_2SiO_3 -
 NaOH - KOH - H_2O . Report No.1: Solubility diagram of the system
 Na_2SiO_3 - KOH - H_2O at 0°C . Izv.AN Arm.SSR Khim.nauki 13 no.1:
25-30 '60. (MIRA 13:7)

1. Institut khimii Sovnarkhoza ArmSSR.
(Sodium silicate)
(Potassium hydroxide)
(Systems (Chemistry))

MANVELYAN, M.G.; BABAYAN, G.G.; YEDOYAN, R.S.; VOSKANYAN, S.S.

Investigation of the methods of preparing sodium hydrometasilicate containing five water molecules. Izv. AN Arm. SSR Khim. nauki 13 no.2/3:111-116 '60. (MIRA 13:10)

1. Institut khimii Sovnarkhoza ArmSSR.
(Sodium silicate)

MANVELYAN, M.G.; BABAYAN, G.G.; GEVORKYAN, S.V.; ASLANYAN, D.G.

Exchange reaction between calcium metasilicate and sodium carbonate.
Izv. AN Arm. SSR. Khim. nauki 13 no.4:235-243 '60. (MIRA 13:12)

1. Institut khimii Sovnarkhoza ArmSSR.
(Calcium silicate) (Sodium carbonate)

MANVELYAN, M.G.; BABAYAN, G.G.; SAYAMYAN, E.A.; VOSKANYAN, S.S.;
OGANESYAN, E.B.

Investigating the solubility in the system $\text{Na}_2\text{SiO}_3 - \text{Na}_2\text{CO}_3 - \text{H}_2\text{O}$
at 25 C. Izv.AN Arm.SSR.Khim.nauki 14 no.4:303-308 1961.
(MIRA 14:10)

1. Institut khimii Sovnarkhoza Armyanskoy SSR.
(Sodium silicate) (Sodium carbonate)
(Solubility)

MANVELYAN, M.G.; BABAYAN, G.G.; GEVORKYAN, S.V.; ASLANYAN, D.G.;
KARAPETYAN, V.TS.

Study of the system $\text{Na}_2\text{SiO}_3 - \text{Ca}(\text{OH})_2 - \text{H}_2\text{O}$ at 25°C and of the conditions of the adsorption of sodium hydroxide on a calcium metasilicate precipitate. Izv.AN Arm.SSR.Khim.nauki 14 no.4:309-317 '61. (MIRA 14:10)

1. Institut khimii Sovnarkhoza Armyanskoy SSR.
(Calcium silicate) (Sodium hydroxide) (Adsorption)

MANVELYAN, M.G.; BABAYAN, G.G.

All-Union Conference held in Erivan on the chemistry and technology
of alumina. TSvet. met. 34 no.3:89-90 Mr '61. (MIRA 14:3)
(Alumina) (Chemistry, Metallurgic--Congresses)

MANVELYAN, M.G.; BABAYAN, G.G.; SAYAMYAN, E.A.; VOSKANYAN, S.S.; OVANESYAN, E.B.

Crystallization of $\text{Na}_2\text{SiO}_3 \cdot 9\text{H}_2\text{O}$ from solutions containing silica,
caustic soda and potash. Zhur.prikl.khim. 34 no.10:2154-2158 0
'61. (MIRA 14:11)

1. Nauchno-issledovatel'skiy institut khimii Sovnarkhoza Armyanskoy
SSR,

(Sodium silicate) (Crystallization)

MANVELYAN, M.G.; GEVORKYAN, S.V., kand.tekhn.nauk; BABAYAN, G.G., kand.
khimicheskikh nauk

Methods of preparation and uses of calcium metasilicate. Zhur.
VKHO 7 no.1:91-93 '62. (MIRA 15:3)

1. Chlen-korrespondent Akademii nauk Armyanskoy SSR (for Manvelyan).
(Calcium silicate)

BABAYAN, G.G.; SAYAMYAN, E.A.; GYUNASHYAN, A.P.; OGANESYAN, E.B.; VOSKANYAN, S.S.

Solubility in the system $K_2SiO_3 - K_2CO_3 - H_2O$ at and $20^{\circ}C$. Izv. AN Arm.SSR. Khim.nauki. 16 no.3:221-228 '63. (MIRA 17:2)

1. Institut khimii Soveta narodnogo khozyaystva Armyanskoy SSR.

BABAYAN, G.G.; GY'INASHYAN, A.P.

Thermographic study of some sodium and potassium metasilicates.
Izv.AN Arm.SSR. Khim.nauki 16 no.4:327-334 '63. (MIRA 16:9)

1. Institut khimii Soveta narodnogo khozyaystva Armyanskoy SSR.

MANVELYAN, M.G.; BABAYAN, G.G.; GALSTYAN, V.D.; GEVORKYAN, S.V.;
ASLANYAN, D.G.

Interaction of aqueous solutions of potassium and lithium
carbonates with calcium metasilicate. Izv. AN Arm. SSR.
Khim. nauki 16 no.5:437-441 '63. (MIRA 17:1)

1. Institut khimii Soveta narodnogo khozyaystva Armyanskoy
SSR.

BABAYAN, G.G.; OGANESEYAN, E.B.; GYURASHYAN, A. I.; SAYAKYAN, E.A.

Solubility diagram of the system $\text{NaOH} - \text{KOH} - \text{H}_2\text{O}$ at 0 and 20°C. Izv. AN Arm SSR. Khim. nauki 16 no.6:539-545 '63. (MIRA 17:8)

1. Institut khimii Gosudarstvennogo komiteta tsvetnykh i chernykh metallov SSSR.

MANVELYAN, M.G.; BABAYAN, G.G.; VOSKANYAN, S.S.; SAYAMYAN, E.A.;
OGANESYAN, E.B.

System Na^+ , K^+ , SiO_3^{2-} , CO_3^{2-} - H_2O at 0 and 25° C.

Zhur. prikl. khim. 36 no.11:2402-2408 N '63.

(MIRA 17:1)

BABAYAN, G.G.; KARAPETYAN, V.TS.

Physicochemical properties of aqueous solutions of sodium and potassium silicates. Part 1: Electric conductance and viscosity of potassium silicate aqueous solutions. Izv.AN Arm.SSR.Khim.nauki 17 no.1: 29-37 '64. (MIRA 17:4)

1. Institut khimii Gosudarstvennogo komiteta tsvetnykh i chernykh metallov SSSR.

BABAYAN, G.G.; MURADYAN, S.S.; OGANESYAN, E.B.

Physicochemical properties of sodium and potassium
silicate solutions. Part 2: Vapor density of sodium silicate
solutions. Izv.AN Arm.SSR.Khim.nauki 17 no. 3:290-295 '64.
(MIRA 17:7)

1. Institut khimii Gosudarstvennogo komiteta tsvetnykh i chernykh
metallov SSSR.

MANVELYAN, M.S.; BABAYAN, G.G.; GALARYAN, S.A.

Infrared absorption spectra of sodium metasilicate hydrates.
Izv. AN Arm.SSR.Khim.nauki 17 no.1:375-380 '64.

(MIRA 18:6)

1. Nauchno-issledovatel'skiy institut khimii Gosudarstvennogo
komiteta tsvetnykh i Chernykh metallov pri Gosplane SSSR.

PASAYAN, G.G.; GALSTYAN, V.D.

Effect of certain factors on the crystallization of sodium
metasilicate monohydrate from alkaline silica solutions. Izv.
AN Arm.SSR.Khim.nauki 17 no.4:381-386 '64. (MIRA 18:6)

1. Nauchno-issledovatel'skiy institut khimii Gosudarstvennogo komiteta
tsvetnykh i chernykh metallov pri Gosplane SSSR.

MAKHOV, M.G.; GLAVINSKY, S.V.; ADAMCHIK, A.I.; BABAYAN, G.I.

Crystallization of pure potash from solutions containing
aluminum, iron, silica, and sodium. Zhur. prikl. khim. 37
no.10:2132-2139 O 1964.

(RINA 15:11)

YEDOYAN, R.S.; MANVELYAN, M.G.; BABAYAN, G.G.

Physicochemical studies of the systems containing
 Na_3AlF_6 , K_3AlF_6 , and Li_3AlF_6 . Part 1: Fusibility diagram of the
system Na_3AlF_6 — K_3AlF_6 . Izv. AN Arm.SSR. Khim.nauki 18 no.1:10-
14 '65. (MIRA 18:5)

1. Yerevanskiy nauchno-issledovatel'skiy institut khimii.

PANOSYAN, A.K.; GAMBARYAN, M.Ye.; BABAYAN, G.S.

Micro-organisms transforming phosphorus in Lake Sevan. Izv. AN
Arm. SSR. Biol. nauki 13 no.10:3-12 '60. (MIRA 13:12)

1. Sektor mikrobiologii i Sevanskaya gidrobiologicheskaya stantsiya
AN ArmSSR.

(SEVAN, LAKE--BACTERIA, PHOSPHORUS)

BABAYAN, G.S.

Distribution of phosphorus bacteria in cropping soils of Lake
Sevan. Izv. AN Arm. SSR. Biol. nauki 17 no.10:41-48 0 '64.
(MIRA 18:8)

PANOSYAN, A.K.; BABAYAN, G.S.

Phosphatase activity as one of specific characteristics of
phosphorus bacteria. Dokl. AN Arm. SSR 40 no.1:61-63 '65.
(MIRA 18:7)

1. Institut mikrobiologii AN ArmSSR. 2. Chlen-korrespondent
AN ArmSSR (for Panosyan).

PANOSYAN, A.K.; BABAYAN, G.S.

Phosphatase activity in outcropped grounds of the Sevan Lake region. Dokl. AN Arm. SSR 40 no.3:189-192 '65. (MIRA 18:12)

1. Institut mikrobiologii AN ArmSSR. 2. Chlen-korrespondent AN ArmSSR (for Panosyan). Submitted October 19, 1964.

TATEVOSYAN, G.T.; BABAYAN, G.T.

Synthesis of Heptene-2-carboxylic acid-5. Dokl.AN Arm. SSR 6 no.2:
47-50 '47. (MLRA 9:8)

1. Khimicheskiy institut Akademii nauk Armyanskoy SSR, Yerevan.
Predstavleno S.P. Gambaryanom.
(Heptene carboxylic acid)

(See also BABAYAN, A. T.)

MANUSADZHYAN, V.G.; BABAYAN, G.V.

Use of electron paramagnetic resonance in biology. Izv. AN Arm.
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(MIRA 18:12)

1. Sektor radiobiologii AMN SSSR. Submitted March 5, 1965.

SECRET

The following information is being provided to the CIA
for its use in the study of the Cuban Revolution.
(S) (U) (C) (R) (P) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (AA) (AB) (AC) (AD) (AE) (AF) (AG) (AH) (AI) (AJ) (AK) (AL) (AM) (AN) (AO) (AP) (AQ) (AR) (AS) (AT) (AU) (AV) (AW) (AX) (AY) (AZ) (BA) (BB) (BC) (BD) (BE) (BF) (BG) (BH) (BI) (BJ) (BK) (BL) (BM) (BN) (BO) (BP) (BQ) (BR) (BS) (BT) (BU) (BV) (BW) (BX) (BY) (BZ) (CA) (CB) (CC) (CD) (CE) (CF) (CG) (CH) (CI) (CJ) (CK) (CL) (CM) (CN) (CO) (CP) (CQ) (CR) (CS) (CT) (CU) (CV) (CW) (CX) (CY) (CZ) (DA) (DB) (DC) (DD) (DE) (DF) (DG) (DH) (DI) (DJ) (DK) (DL) (DM) (DN) (DO) (DP) (DQ) (DR) (DS) (DT) (DU) (DV) (DW) (DX) (DY) (DZ) (EA) (EB) (EC) (ED) (EE) (EF) (EG) (EH) (EI) (EJ) (EK) (EL) (EM) (EN) (EO) (EP) (EQ) (ER) (ES) (ET) (EU) (EV) (EW) (EX) (EY) (EZ) (FA) (FB) (FC) (FD) (FE) (FF) (FG) (FH) (FI) (FJ) (FK) (FL) (FM) (FN) (FO) (FP) (FQ) (FR) (FS) (FT) (FU) (FV) (FW) (FX) (FY) (FZ) (GA) (GB) (GC) (GD) (GE) (GF) (GG) (GH) (GI) (GJ) (GK) (GL) (GM) (GN) (GO) (GP) (GQ) (GR) (GS) (GT) (GU) (GV) (GW) (GX) (GY) (GZ) (HA) (HB) (HC) (HD) (HE) (HF) (HG) (HH) (HI) (HJ) (HK) (HL) (HM) (HN) (HO) (HP) (HQ) (HR) (HS) (HT) (HU) (HV) (HW) (HX) (HY) (HZ) (IA) (IB) (IC) (ID) (IE) (IF) (IG) (IH) (II) (IJ) (IK) (IL) (IM) (IN) (IO) (IP) (IQ) (IR) (IS) (IT) (IU) (IV) (IW) (IX) (IY) (IZ) (JA) (JB) (JC) (JD) (JE) (JF) (JG) (JH) (JI) (JJ) (JK) (JL) (JM) (JN) (JO) (JP) (JQ) (JR) (JS) (JT) (JU) (JV) (JW) (JX) (JY) (JZ) (KA) (KB) (KC) (KD) (KE) (KF) (KG) (KH) (KI) (KJ) (KK) (KL) (KM) (KN) (KO) (KP) (KQ) (KR) (KS) (KT) (KU) (KV) (KW) (KX) (KY) (KZ) (LA) (LB) (LC) (LD) (LE) (LF) (LG) (LH) (LI) (LJ) (LK) (LL) (LM) (LN) (LO) (LP) (LQ) (LR) (LS) (LT) (LU) (LV) (LW) (LX) (LY) (LZ) (MA) (MB) (MC) (MD) (ME) (MF) (MG) (MH) (MI) (MJ) (MK) (ML) (MM) (MN) (MO) (MP) (MQ) (MR) (MS) (MT) (MU) (MV) (MW) (MX) (MY) (MZ) (NA) (NB) (NC) (ND) (NE) (NF) (NG) (NH) (NI) (NJ) (NK) (NL) (NM) (NN) (NO) (NP) (NQ) (NR) (NS) (NT) (NU) (NV) (NW) (NX) (NY) (NZ) (OA) (OB) (OC) (OD) (OE) (OF) (OG) (OH) (OI) (OJ) (OK) (OL) (OM) (ON) (OO) (OP) (OQ) (OR) (OS) (OT) (OU) (OV) (OW) (OX) (OY) (OZ) (PA) (PB) (PC) (PD) (PE) (PF) (PG) (PH) (PI) (PJ) (PK) (PL) (PM) (PN) (PO) (PP) (PQ) (PR) (PS) (PT) (PU) (PV) (PW) (PX) (PY) (PZ) (QA) (QB) (QC) (QD) (QE) (QF) (QG) (QH) (QI) (QJ) (QK) (QL) (QM) (QN) (QO) (QP) (QQ) (QR) (QS) (QT) (QU) (QV) (QW) (QX) (QY) (QZ) (RA) (RB) (RC) (RD) (RE) (RF) (RG) (RH) (RI) (RJ) (RK) (RL) (RM) (RN) (RO) (RP) (RQ) (RR) (RS) (RT) (RU) (RV) (RW) (RX) (RY) (RZ) (SA) (SB) (SC) (SD) (SE) (SF) (SG) (SH) (SI) (SJ) (SK) (SL) (SM) (SN) (SO) (SP) (SQ) (SR) (SS) (ST) (SU) (SV) (SW) (SX) (SY) (SZ) (TA) (TB) (TC) (TD) (TE) (TF) (TG) (TH) (TI) (TJ) (TK) (TL) (TM) (TN) (TO) (TP) (TQ) (TR) (TS) (TT) (TU) (TV) (TW) (TX) (TY) (TZ) (UA) (UB) (UC) (UD) (UE) (UF) (UG) (UH) (UI) (UJ) (UK) (UL) (UM) (UN) (UO) (UP) (UQ) (UR) (US) (UT) (UU) (UV) (UW) (UX) (UY) (UZ) (VA) (VB) (VC) (VD) (VE) (VF) (VG) (VH) (VI) (VJ) (VK) (VL) (VM) (VN) (VO) (VP) (VQ) (VR) (VS) (VT) (VU) (VV) (VW) (VX) (VY) (VZ) (WA) (WB) (WC) (WD) (WE) (WF) (WG) (WH) (WI) (WJ) (WK) (WL) (WM) (WN) (WO) (WP) (WQ) (WR) (WS) (WT) (WU) (WV) (WW) (WX) (WY) (WZ) (XA) (XB) (XC) (XD) (XE) (XF) (XG) (XH) (XI) (XJ) (XK) (XL) (XM) (XN) (XO) (XP) (XQ) (XR) (XS) (XT) (XU) (XV) (XW) (XX) (XY) (XZ) (YA) (YB) (YC) (YD) (YE) (YF) (YG) (YH) (YI) (YJ) (YK) (YL) (YM) (YN) (YO) (YP) (YQ) (YR) (YS) (YT) (YU) (YV) (YW) (YX) (YY) (YZ) (ZA) (ZB) (ZC) (ZD) (ZE) (ZF) (ZG) (ZH) (ZI) (ZJ) (ZK) (ZL) (ZM) (ZN) (ZO) (ZP) (ZQ) (ZR) (ZS) (ZT) (ZU) (ZV) (ZW) (ZX) (ZY) (ZZ)

SPIVAKOVA, E.M.,; BABAYAN, I.A.; TANANAYEV, I.V., akademik, otv.
red.; TRONEV, V.G., doktor khim. nauk, zum. otv. red.;
DOROKHJNA, I.N., tekhn. red.

[Chemistry of rare elements; a bibliographic index of Soviet
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Moskva. Izd-vo "Nauka," No.3. Ge, Zr, Hf, Ta, Se, Te, Re.
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BABAYAN, I.M.; VETRCV, A.T.

Composite tie ropes. Sbor.rats.predl.vnedr.v proizv. no.1:26
'61. (MIRA 14:7)

1. Azerbaydzhanskiy truboprokatnyy zavod.
(Rope)

BABAYAN, Kh. P.

USSR/Nuclear Physics - Varitrons
Nuclear Physics - Cosmic Rays

Jul 49

"Observation of Varitrons of Various Masses in Photographic Plates," A. I. Alkhanyan, D. M. Samoylovich, I. I. Gurevich, Kh. P. Babayan, R. I. Gerasimova, Inst of Phys Problems, Acad Sci USSR, Phys, Inst, Acad Sci Armenian SSR, 3 pp

"Zhur Eksp 1 Teoret Fiz" Vol XIX, No 7

Introduces results of studying separate traces of charged cosmic particles. Traces used were at least 200 microns long. Ends of traces lay in the emulsion film. These tests again confirmed existence of varitrons with masses up to 10,000 times the mass of an electron. Submitted 9 Apr 49.

PA 51/49T56

BABAYAN, Kh. P.

USSR/Nuclear Physics - Varitrons
Nuclear Physics - Cosmic Rays

Jul 49

"Disintegration of Heavy Varitrons," A. I. Alikhanyan, D. M. Samoylovich, I. I. Gurevich, Kh. P. Babayan, Phys Inst, Acad Sci Armenian SSR, Inst of Phys Problems, Acad Sci USSR, 4 pp

"Zhur Skaper i Teoret Fiz" Vol XIX, No 7

Results of investigations of traces caused by cosmic particles in photographic emulsions. Established that at least six groups of trajectories were caused by varitrons with masses 180-200, 320-350, 650-700, 950-1,000, 3,500-4,000 and 8,000-10,000 times the electron mass. Submitted 9 Apr 49.

MA 51/49855

"APPROVED FOR RELEASE: 06/06/2000

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APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000102810014-4"

Shklyar, M. P.

Shklyar, M. P. -- "Determining the Mass of Charged Particles by the Laser-
Method." *Soviet Phys-Usp*, Moscow Lect. Note, Moscow 1955.
(ref-rating: *Jurnal--Fizika*, Jan 54)

DO: 3.11 1st, 22 June 1954

BABAYAN, Kh.P.; MARUTYAN, N.A.; MATEVOGYAN, K.A.; SARINYAN, A.G.

Angular correlation in $\pi^+ \rightarrow \mu^+ \rightarrow e^+$ decay observable in a nuclear emulsion. Dokl. AN Arm. SSR 26 no.3:145-148 '58. (MIR. 12:10)

1. Fizicheskiy institut AN Armyanskoy SSR, Predstavleno A.I. Alikhanyanov.

(Mesons--Decay)

24/10/56

AUTHORS: Babayan, Kh. P., Marutyan, N. A., Matevosyan, 56-1-36/56
K. A., Rostomyan, M. G.

TITLE: Two Cases of the Disintegration of a Hyperfragment
(Dva sluchaya raspada giperfragmenta)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,
Vol. 34, Nr 1, pp. 231-232 (USSR)

ABSTRACT: In a pile of Ilford (Il'ford)-G-5 - emulsion-layers irradiated in the stratosphere the authors discovered the disintegration of a heavy hyperfragment with the flying off of an energy-rich proton; this hyperfragment was interpreted as F_{Λ} or N_{Λ} . Furthermore a mesonic disintegration of a hyperfragment was discovered in this pile. Case I: A multiple-charged hyperfragment ($R = 127 \mu$) flies out of a star $15 + 2n$. The absence of δ -electrons at the end of the range and the narrowing of the trace show that the hyperfragment came to a standstill. From the length of the narrowing the charge was estimated to $Z = 8 \pm 2$. The hyperfragment disintegrates at the end of its range into three charged particles. The behavior of these three particles is also given here. The following disintegration schemata of the

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Two Cases of the Disintegration of a Hyperfragment

56-1-36/56

hyperfragment with positive bond energy of the Λ^0 particles are possible: $\Lambda F^{18,19,20} \rightarrow d(t) + p(d,t) + p + C$, $\Lambda He^{20,21} \rightarrow p(d,t) + p(d,t, He^3, He^4) + p + N(C)$. In the disintegration with participation of a neutral particle the possibility of a lighter hyperfragment is not out of the question. Case II: A light hyperfragment which disintegrates after 276 μ into 2 particles flies off a star of the type 21 + 8p. The scattering of the hyperfragment indicates a disintegration in the position of rest and the charge was estimated with $Z = 2$ to 3. The trace is produced by a pion with the energy $(32 \pm 5, 0)$ MeV. The kinematic analysis of the case furnishes the schemata $He_{\Lambda}^5 \rightarrow p + \pi^- + He^4 + Q_1$; $Li_{\Lambda}^{7,8} \rightarrow p + \pi^- + Li^{6,7} + Q_2$, where $Q_1 = Q_2 = (39, 0 \pm 5, 0)$ MeV applies. There are 2 figures and 6 references.

ASSOCIATION: Physical Institute AN Armenian SSR (Fizicheskiy institut Akademii nauk Armyanskoy SSR)

SUBMITTED: September 19, 1957

AVAILABLE: Library of Congress
Card 2/2

7(5), 21(0)

AUTHORS:

Babayan, Kh. P., Marutyan, N. A.,
Matevosyan, K. A., Sarinyan, M. G.

SOV/56-35-3-1/61

TITLE:

The Energy Dependence of the Angular Correlation of
Positrons Originating From $\pi \rightarrow \mu \rightarrow e$ Decay (Energeticheskaya
zavisimost' uglovoy korrelyatsii pozitronov iz $\pi \rightarrow \mu \rightarrow e$ -
raspada)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol 35, Nr 3, pp 561 - 564 (USSR)

ABSTRACT:

In the present paper the authors deal mainly with
investigations of $\pi \rightarrow \mu \rightarrow e$ events in nuclear
emulsions (investigations were carried out at Yerevan,
the results will be published in detail in DAN ArmSSR
(Ref 9) in a paper which is already
being printed); the authors compare the results obtained
with those obtained by numerous other authors. (Lee
and Jang (Li, Yang), (Ref 1), Landau (Ref 2), Vaysenberg,
Smirnitskiy (Refs 7,8) and others). The authors of
the present paper investigated 405 of such decays; they
found that the experimental energy dependence of the

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The Energy Dependence of the Angular Correlation of
Positrons Originating From $\pi \rightarrow \mu + e$ Decay

30V/36-35-3-1/1

backward-forward ratio for the emitted positrons agrees with the predictions of the two-component neutrino theory. The non-conservation of parity in the $\pi \rightarrow \mu + e$ decay leads to a polarization of the spin in or inversely to the direction of motion. In the following decay of the myon the positrons have an energy-dependent angular symmetry, which, according to the two-component neutrino theory, has the form: $dN = -2N_0^2 [(3-2\xi) + \lambda \cos \theta (2\xi - 1)] d\xi d(\cos \theta)$ (ξ = ratio between the energy of the positron and the maximal possible energy, θ = angle between the directions of flight of the myon and positron, λ = constant, $-1 \leq \lambda \leq +1$). The authors investigated a total of 2160 decay events (Ref 9) and found an asymmetry coefficient $A = -(0,135 \pm 0,043)$. In 405 cases selected according to certain points of view the following distribution of positron ranges was found:
Length of traces: 1-2 2-3 3-4 4-5 5-6 6-7 7-8 >8 mm
Number of traces: 194 91 54 26 18 10 8 4
In a table the authors show the A-values determined by various other authors at 2 different places (Refs 1-17).

Card 2/4

The Energy Dependence of the Angular Correlation of
Positrons Originating From $\pi \rightarrow \mu \rightarrow e$ Decay

SOV/56-35-3-1/61

(More than 15 000 observations partly with cosmic rays and partly with accelerators). In the 405 cases selected by the authors A was between $-(0,153 \pm 0,086)$ at $\epsilon = 0,1$ and $-(0,400 \pm 0,220)$ at $\epsilon = 1,0$. In conclusion the authors thank A.I.Alikhanyan for the interest he displayed, I.I. Gol'dman for his advice, and L.N.Tatevosyan for assisting in carrying out measurements. There are 5 figures, 1 table, and 17 references, 4 of which are Soviet.

ASSOCIATION: Fizicheskii institut Akademii nauk Armyanskoy SSR (Physics Institute, AS Armyanskaya SSR)

SUBMITTED: February 13, 1958 (initially) and June 6, 1958 (after revision)

Card 3/4

BABAYAN, Kh. P.

STUDY OF INTERACTION PROCESSES OF $10^{11} - 10^{12}$
PARTICLES WITH IRON AND GRAPHITE NUCLEI

Kh.P. Babayan, N. L. Grigorov, M. M. Dubrovin,
V. S. Murzin, V. A. Sobinyakov, and I. D. Rapoport

1. The use of the "ionization calorimeter" which comprises a large number of ionization chambers made it possible to investigate the interaction of particles of known energy.

2. Studies carried out in 1957 at 3860 m above sea level and in 1958-59 at 3200 m above sea level have produced results that are in good agreement. From these results, the following conclusions may be drawn:

a) when interacting with Fe nuclei, $10^{11} - 10^{12}$ ev particles lose, as a rule, nearly all their energy in the production of mesons:

b) there is a large probability that as a result of collision with a nucleus there are produced a small number of particles, the total energy of which amounts to $\sim 50\%$ of the energy of the primary particle (in the majority of cases these particles are not nucleons):

c) big fluctuations are observed in energy transfer to π^0 -mesons.

Report presented at the International Cosmic Ray Conference, Moscow, 6-11 July 1959.

S/022/60/013/01/09/010

C 111/ C 33

AUTHORS: Babayan, Kh. P., Marutyan, N. A., Matévossyan, K. A., Sarinyan, M. G.,

TITLE: Investigation of the Hyperfragments in the Nuclear Emulsion /9

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1960, Vol. 13, No. 1, pp. 165-168

TEXT: Report on the systematic investigation of a nuclear emulsion Ilford G - 5 of 600 μ layers which was cosmically irradiated in the height of 27 km in Italy in 1955. The material was placed at disposal to the authors by Professor Pawell. The decay of 6 hyperfragments was stated. In (Ref.3) the authors already reported on two cases. The representation of the other four cases is now published. The values obtained for B_{α} coincide in the frame of statistical errors with the known data. ✓B

There are 3 references: 1 Soviet, 1 English and 1 Italian.

ASSOCIATION: Fizicheskiy institut AN Armyanskoy SSR (Physical Institute AS Armjanskaya SSR)

SUBMITTED: August 20, 1958

Card 1/1

BABAYAN, Kh.P.; SARINYAN, M.G.; TUMANYAN, E.R.

Investigating a high energy interaction in photographic emulsion.
Zhur.eksp.i teor.fiz. 38 no.2:313-318 F '60. (MIRA 14:5)

1. Institut fiziki Akademii nauk Armyanskoy SSR.
(Photography, Particle track) (Cosmic rays)

S/058/61/000/010/020/100
A001/A101

AUTHORS: Babayan, Kh.P., Grigorov, N.L., Dubrovin, M.M., Mishchenko, L.G.,
Murzin, V.S., Sarycheva, L.I., Sobinyakov, V.A., Rappoport, I.D.

TITLE: Investigation of interaction of $10^{11} - 10^{12}$ ev energetic particles
with nuclei of iron and graphite

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 96-97, abstract 10B506
("Tr. Mezhdunar. konferentsii po kosmich. lucham, 1959, v. 1", Mos-
cow, AN SSSR, 1960, 176 - 182)

TEXT: The authors present the results of an investigation, carried out by
means of an ionization calorimeter, of interactions of $10^{11} - 10^{12}$ ev particles
with nuclei of iron and graphite on the Aragats mountain (3,200 m above sea level).
It is shown that: 1) Coefficient of inelasticity of interaction of particles
with energy $E_0 \geq 2 \times 10^{11}$ ev with iron nuclei $\bar{\alpha}_{Fe} = 1.0 \pm 0.09$; 2) In the inter-
action with the iron nucleus of a 2×10^{11} ev nucleon, one energetically outstand-
ing particle is produced with average energy of $\sim E_0$, probability of this occur-
rence being close to unity; most probable this particle is a π -meson; 3) The
mean coefficient of inelasticity of interactions of particles with $E_0 \geq 10^{11}$ ev

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Investigation of interaction ...

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with carbon nuclei $\bar{\alpha}_c \leq 0.5 \bar{\alpha}_{Fe}$; 4) the experimental data obtained for $\bar{\alpha}_{Fe}$ and $\bar{\alpha}_c/\alpha_{Fe} \leq 0.5$ rule out the possibility of consecutive collisions with individual nucleons of the nucleus (or small groups of nucleons) at interactions of particles with energies $\geq 10^{11}$ ev with heavy nuclei; 5) in the energy range of nucleons $10^{10} - 10^{11}$ ev the interaction with heavy nuclei changes its nature. ✓

L. Dorman

[Abstracter's note: Complete translation]

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GRIGOROV, N.L.; TRETYAKOVA, C.A.; SHESTOPEROV, V.J.; BABAYAN, C.P.; BAYADSYAN, N.G.; BUJA, Z.; LOSKIEWICZ, J.; MASSALSKI, J.; OLES, A.

Integral spectrum of ionization pulses caused by nuclear active particles of cosmic radiation at mountain altitudes. Nukleonika 7 no.2:61-73 '62.

1. Institute of Nuclear Physics, University of Moscow (for Grigorov, Tretyakova and Shestopierov). 2. Institute of Nuclear Physics, Armenian Academy of Sciences, Erevan (for Babayan and Bayadsyan). 3. Institute of Nuclear Research, Polish Academy of Sciences, Cracow and Department of Physics II, Academy of Mining and Metallurgy, Cracow (for Buja, Loskiewicz, Massalski and Oles.)

GRIGOROV, N.L.; TRETYAKOVA, C.A.; SHESTOPIEROV, V.Y.; BABAYAN, C.P.;
BAYADSYAN, N.G.; BABECKI, J.; LOSKIEWICZ, J.; MASSALSKI, J.;
OLES, A.

Investigations of energy particles interactions with atomic
nuclei at the mountain altitudes. Nukleonika 7 no.12:
759-767 '62.

1. Institute of Nuclear Physics, University of Moscow, Moscow
(for Grigorov, Tretyakova, Shestopierov). 2. Armenian Academy
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and Bayadsyn). 3. Institute of Nuclear Research, Laboratory of
High Energy Physics, Krakow, Polish Academy of Sciences (for
Babecki, Loskiewicz, Massalski, Oles).

VSJS
S/048/62/026/005/002/022
B102/B104

3.2410 (2205, 2705, 2805)

AUTHORS: Babayan, Kh. P., Babetski, Ya. S., Boyadzhyan, N. G.,
Buya, Z. A., Grigorov, N. L., Loukevich, Ye. S.,
Mamidzhanyan, E. A., Massal'skiy, Ye. I., Oles', A. A.,
Tret'yakova, Ch. A., and Shestoporov, V. Ya.

TITLE: Investigation of the interaction of high-energy particles
with atomic nuclei on mountains

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26,
no. 5, 1962, 558 - 571

TEXT: Ionization bursts caused by the electron-photon component of a
shower of cosmic-ray particles were studied with an array of ionization
chambers (Fig. 1) at the mountain station (3200 m) of the Akademiya nauk
Armyanskoy SSR (Academy of Sciences Armyanskaya SSR). The array consisted
of six rows of ionization chambers separated by layers of lead and
graphite, and covered an area of 10 m². Owing to this large area, heavy
bursts with a total energy of locally generated π^0 mesons amounting to
 $\sim 10^{13}$ ev could be photographed. The data obtained were analyzed for

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ionization bursts in the filter of the arrangement, for the altitude dependence of the burst frequency, and for the burst spectrum and its dependence on the size of the arrangement; the mechanism of local π^0 generation by single nuclear-active particles was investigated. The bursts observed were grouped according to their intensity I , i.e., according to the number of relativistic particles involved; for each group, the numbers of ionization and "structuralized" bursts were determined for rows I-IV. The spectrum of ionization bursts can be described by $N(>I) = AI^{-\gamma}$ for all chambers. The index of the integral spectrum for $2 \cdot 10^3 \leq I \leq 2 \cdot 10^5$ equals 1.37 ± 0.02 . With an area of $\sim 0.6 \text{ m}^2$ it was found that $\sim 20\%$ of the bursts were "structuralized" for $1 \cdot 10^3 \leq I \leq 5 \cdot 10^3$. At $I > 1 \cdot 10^4$ and 10 m^2 50% of the bursts (at sea level) and 75% (on the mountains) have a structure. An analysis of the course of the bursts with the altitude has shown that: (1) the integral spectrum of muon-induced bursts with $3 \cdot 10^3 - 3 \cdot 10^4$ particles has an exponent of $\gamma = 2.22 \pm 0.14$; (2) for a burst of equal intensity, induced by a single nuclear-active particle, $\gamma = 1.98 \pm 0.09$; (3) at 3200 m, the muon contribution to single heavy bursts is small (15% of all bursts with $\sim 10^3$ particles, and $\sim 4\%$ of those with $\sim 2 \cdot 10^4$ particles; Card 2/4

Investigation of the...

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(4) at sea level, the muon contribution is $\sim 70\%$ ($\sim 10^3$ particles) and $\sim 50\%$ ($\sim 2 \cdot 10^4$ particles). The burst spectrum was found to depend greatly on the area of the measuring arrangement. With $2 \cdot 10^3 - 2 \cdot 10^5$ particles, γ goes over from 1.37 ± 0.02 for $(330 \text{ cm})^2$ to 1.99 ± 0.05 for $10 \cdot 330 \text{ cm}^2$. The spectrum of bursts with a π^0 energy transfer of $3 \cdot 10^{11} - 10^{13}$ ev agrees with that of nuclear-active particles, and exhibits no "breaks". When particles with $E > 10^{12}$ ev interact with light nuclei in about 10% of the events, the interaction is completely inelastic, and the π^0 energy transfer amounts to 60 - 80% of the primary-particle energy. Such interactions obviously play a significant role in the formation of extensive air showers with at least $10^4 - 10^5$ particles. There are 8 figures and 7 tables.

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KH. P. BABAYAN, S. I. BRIKKER, N. L. GRIGOROV, A. V. PODGURSKAYA,
A. I. SAVELYEVA, V. Ya. SHESTOPEROV

Investigation of Nuclear Interaction at 10^{13} ev by means of "Controlled"
Photoemulsions Method

report submitted for the 8th Intl. Conf. on Cosmic Rays (IUPAP), Jaipur India,
2-14 Dec 1963

GRIGOROV, N.L.; TRETYAKOVA, C.A.; SHESTOPEROV, V.J.; BABAYAN, I.P.;
BOYADSYAN, N.A.; MASSALSKI, J.; NIZIOL.B.; OLES, A.

Integral spectrum of nuclear active particles at mountain
altitudes from the investigation of high ionization pulses.
Acta physica Pol 24 no.3:357-371 S'63.

1. Institute of Nuclear Physics, University, Moscow (for
Grigorov, Tretyakova, Shestoperov). 2. Institute of Nuclear
Physics, Armenian Academy of Sciences, Yerevan (for Babayan,
Boyadtsyan). 3. Institute of Nuclear Research, Laboratory
of High Energy Physics, Krakow, and II Department of Physics,
Academy of Mining and Metallurgy, Krakow (for Massalski,
Niziol and Oles).

2.2430

45360

S/056/63/044/001/005/067

B108/B180

AUTHORS:

Babayan, Kh. P., Boyadzhyan, N. G. Grigorov, N. L.,
Tret'yakova, Ch. A., Shestoporov, V. Ya.

TITLE:

Large ionization bursts and the spectrum of the nuclear-
active particles on mountains

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44,
no. 1, 1963, 22 - 34

TEXT: There are considerable discrepancies in the experimental values of
the power exponent of $\Psi(n)dn = A_0 \frac{dn}{n^{\gamma+1}}$ the integral spectrum of the bursts

as determined by various investigators. The present authors studied large
ionization bursts at an altitude of 3200 m above sea level with an arrange-
ment of 92 ionization chambers covering an overall area of 10 m². The
results showed that a considerable part of the ionization bursts are caused
by nuclear-active particles falling simultaneously on to the measuring
apparatus. With a large apparatus the bursts spectrum may be very different
from that of the single nuclear-active particles. This is due to the
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Large ionization bursts and the ...

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incidence of a group of particles ("structurized" bursts) (N. L. Grigorov et al. ZhETF, 33, 5, 1099, 1957). In the apparatus used in this investigation, a γ of 1.38 ± 0.03 was recorded for the simultaneous incidence of particle groups, while that for individual particles was 1.92 ± 0.05 . There are 6 figures and 3 tables.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: June 27, 1962

Card 2/2

L 17607-63

EWI(1)/EWI(m)/BDS/

S/056/63/044/003/009/053

EDD(b)-3

AFFTC/ASD/APGC/IJP(C)

AUTHOR: Babayan, Kh. P. and Marutyan, N. A.

TITLE: Interaction of a high energy multicharged particle with
a nucleus of the photographic emulsion 10

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 3,
1963, 832-839

TEXT: The authors describe the detailed investigation of a unique interaction event of the $16 + 2012$ type between a multicharged particle with an energy of $3 \cdot 10^{11}$ ev per nucleus and the nucleus of a photographic HMKM-P (NIKFI-R) emulsion exposed in a sputnik satellite in August of 1960. Because of the high multiplicity of the interaction and the convenient position of the event in the photographic emulsion, it was possible to obtain sufficiently good statistics for observing the correlation coefficient of 0.81 between the emission angle and the transverse momentum of the secondary particles in the small angle region ($\theta_i < 4^\circ$). The transverse momentum distribution is consistent with the one previously obtained for secondary particles produced in nucleon-nucleon and nucleon-nucleus interactions.

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L 17607-63

s/056/63/044/003/009/053

Interaction of a high energy ...

The mean transverse momentum is found equal to 215 Mev/c. The angular distribution satisfactorily agrees with the hydrodynamic theory. There are 4 figures and 1 table.

ASSOCIATION: Fizicheskii institut Akademii nauk Armyanskoy SSR (Physics Institute
of the Academy of Sciences of the ArSSR)

SUBMITTED: October 2, 1962

Card 2/2

L 19646-63

EWI(m)/BDS

AFFTC/ASD

ACCESSION NR: AP3007056

S/0056/63/045/003/0418/0427

AUTHORS: Babayan, Kh. P.; Boyadzhyan, N. G.; Grigorov, N. L.;
Mamadzhanyan, E. A.; Tret'yakova, Ch. A.; Shetoperov, V. Ya.

TITLE: Energy spectrum of nuclear active particles in extensive
air showers

SOURCE: Zh. eksper. i teoret. fiziki, v. 45, no. 3, 1963, 418-427

TOPIC TAGS: extensive air shower, nuclear active particle, energy
spectrum, ionization burst

ABSTRACT: Ionization bursts produced by nuclear active particles in
extensive air showers were studied with an array of 192 ionization
chambers with area (10 m²) small enough to make the burst spectrum
coincide with the nuclear-active particle spectrum and large enough
to achieve good statistical accuracy. The data obtained indicate
that the spectrum of bursts with more than 1000 nuclear-active par-

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L 19646-63
 ACCESSION NR: AP3007056

ticles depends greatly on the size of the detecting array. The burst spectrum in the range from 1000 to 10,000 particles in showers with a total of 10^5 to 10^6 particles is characterized by a spectrum exponent 1.8--1.9 when measured with an array area of about one meter, but only approximately 1.0 in the case of an array of 10 m^2 , whereas the spectrum exponent of bursts produced by individual particles in the same showers is 1.6 ± 0.1 . Orig. art. has 5 figures.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Nuclear Phys. Inst. Moscow State Univ.); Fizicheskiy institut Akademii nauk Armyanskoy SSR (Physics Inst., Academy of Sciences Armenian SSR)

SUBMITTED: 15Feb63

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Card 2/2